



Attorney's Docket No.: 11642-005001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : David Hornstein
Serial No. : 09/543,868
Filed : April 5, 2000
Title : AESTHETIC PROFILE COLLECTION

Art Unit : 3628
Examiner : Debra F. Charles

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

BRIEF ON APPEAL

The Appeal Brief fee of \$250 is enclosed. Please apply any other charges or credits to
Deposit Account No. 06-1050.

02/24/2005 MBERHE 00000045 09543868
01 FC:2402 250.00 OP

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Date of Deposit

February 18, 2005

Signature

Marie Collins

Typed or Printed Name of Person Signing Certificate

(i.) Real Party in Interest

The real party in interest in the above application is Style Path Inc.

(ii.) Related Appeals and Interferences

The appellant is not aware of any appeals or interferences related to the above-identified patent application.

(iii.) Status of Claims

This is an appeal from the decision of the Primary Examiner in an Office Action dated September 23, 2004, rejecting claims 1-8, 10, 11, 13-22 and 24-37. Claims 9 and 23 were canceled. The examiner indicated that Claim 12 contained allowable subject matter. The claims have been twice rejected. Claims 1-8, 10-22 and 24-37 are the subject of this appeal.

(iv.) Status of Amendments

All amendments have been entered. Appellant filed a Notice of Appeal on **December 23, 2004**.

(v.) Summary of Claimed Subject Matter

Background

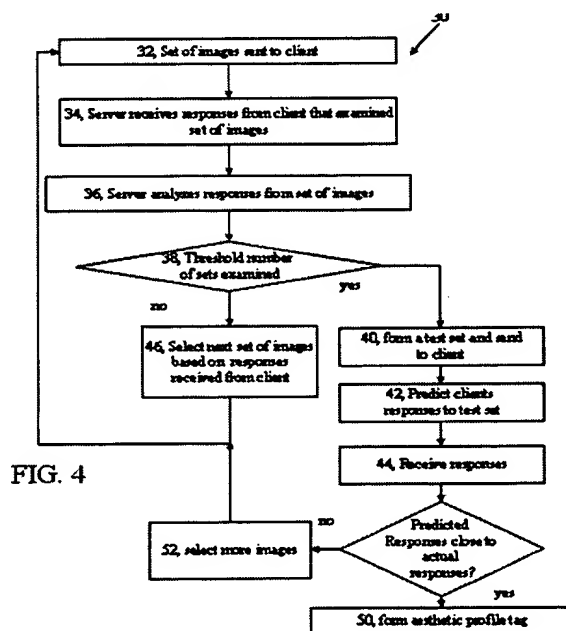
The Internet is a vehicle for buying products of all types. When shopping on the Internet, a buyer may search a database for products that have been catalogued by a particular style name. For example, if shopping for furniture, a shopper can ask for products that are classified as "Contemporary." In clothing, a consumer may search by specifying multiple, objective criteria such as color and price range (e.g., blue shirts under \$20). The shopper would receive results listing shirts that match the color and price specifications. The results could be very numerous and the shirts could be of very different styles, many of which may not appeal to the customer. The shirts could have nothing in common with each other, other than that they are blue and under \$20. [Specification page 1, lines 6-19]

Appellant's Invention

Claim 1

One aspect of Appellant's invention is set out in claim 1 and is a method for selecting products. The method executes over a networked computer system. [FIG. 1, specification page 4, line 24 to page 5 line 4]

Inventive features of the method include providing a plurality of images stored on a storage device, wherein each image has a grade associated with each aesthetic characteristic in a set of predetermined aesthetic characteristics. Appellant's FIG. 4 shows an aesthetic profiling process 30 that conducts testing of an individual's aesthetic preferences by having an individual examine a selected set of images. Each of the images is chosen or constructed to highlight one of a plurality of aesthetic scales that are rated by the process 30. [Specification page 7, line 28 to page 8 line 3].



The method includes sending a user a web page. This feature is described in Appellant's specification [page 5, lines 19-28]. FIG. 2 shows the aesthetic profiling and search process 25

that allows the client system 12 to access 25a the intermediary web site 16. The intermediary web site 16 sends a web page to the browser 12a in client system 12 to gather 25b initial, objective profile information. The web page will have fields for the client to fill-in initial profile information such as name, address and general, objective, non-aesthetic-based product preferences, as is further described in conjunction with FIG. 3.

The method also includes providing one or more questions that request the user's preferences for the test images presented. In FIG. 2, the aesthetic profiling and search process 25 has the client 12 access 25a the intermediary web site 16. The intermediary web site 16 sends a web page to the browser 12a in client system 12 to gather 25b initial, objective profile information. The web page will have fields for the client to fill-in initial profile information such as name, address and general, objective, non-aesthetic-based product preferences. [Specification page 5, lines 19-28].

The method receives a set of responses based on the questions from a user. [Specification page 7, line 14-17]. Based on the user's responses, the method produces a profile of the user's preferences for the aesthetic characteristics as expressed in the plurality of test images. [Specification page 14, lines 1-25]. FIG. 5, shows a profile tag forming process 60 that takes 62 a numerical score assigned to each response and sums 64 that score with like scores from other responses of the user for the same scale. The summation of all of the scores or an average is entered 66 into a field of a vector that corresponds to the location of the scale in the profile tag. The profile tag is formed by summing numerical scores that are assigned to each one of the scales tested in the profile process. For example, referring back to Table 1, the user can be shown images that tests the scale "form" that corresponds to whether the user likes solid or open shapes. The response could be a simple yes or no which assigns a value of e.g., 0 or 1, to each one of the levels presented for the scale form. These scales, over a series of images, e.g., 3 to 5 images, could be added up on a scale by scale basis and their sum can be used to represent the first form scale in the result vector.

Claim 10

Another aspect of Appellant's invention is set out in claim 10 and is a method producing an aesthetic profile tag for a user. Such a method is illustrated in FIG. 4 reproduced above.

The method includes viewing, on a display associated with the computing device, a set of test images selected from a plurality of images, wherein each of the plurality of images has a grade associated with a plurality of aesthetic characteristics that are expressed in the respective image. This feature is described in Appellant's specification [page 23, lines 24-28]. The process 30 starts by an individual examining 32 an initial set of images. The set of images are chosen to emphasize a particular aesthetic scale as well as a sub-scale within each of these scales.

Another inventive feature includes entering, on a user input device associated with the computing device, preferences for the selected test images. This feature is described in Appellant's specification [page 23, lines 24-28]. The user examines the initial set of images and indicates its preferences for likes and dislikes of the aesthetic set by grading the images on a preference scale. The responses are sent to and received 34 by the server 16.

Claim 13

Another aspect of Appellant's invention is set out in claim 13 as a computer program product for establishing a user profile of aesthetic preferences. The computer program product resides on a computer readable medium [FIG. 1 aesthetic based selection process]. The computer program transmits a set of test images selected from a plurality of images, wherein each image has a grade associated with each aesthetic characteristic in a set of predetermined aesthetic characteristics. This feature is described in Appellant's specification [page 23, lines 24-28]. The process 30 starts by an individual examining 32 an initial set of images. The set of images are chosen to emphasize a particular aesthetic scale as well as a sub-scale within each of these.

The computer program receives responses from a user for preferences for aesthetic characteristics expressed in the set of test images. This feature is described in Appellant's specification [page 8, lines 6-13]. The user examines the initial set of images and indicates its preferences for likes and dislikes of the aesthetic set by grading the images on a preference scale. The responses are sent to and received 34 by the server 16. The server process 30 determines 36 whether a threshold number of exemplary sets of images have been examined by the user. If the threshold has not been reached, the server analyzes 38 the responses to determine a new set of images to send to the client.

The computer program product produces a graphical user interface that contains questions that elicit information from the user regarding the user's preferences for aesthetic characteristics expressed in the set of images. This feature is described in Appellant's specification [page 8, lines 6-13].. FIG. 14 shows a graphical user interface as a web page 200. The web page 200 includes information contained in Table 1 This feature is described in Appellant's specification [page 10]. The information is presented as a series of questions regarding each of the scales. The user is prompted to select preferences.

Claim 15

Another aspect of Appellant's invention is set out in claim 15 as a system for selecting products. The system 10 includes a computer [client stations 12 specification page 4, line 23] and a storage device comprising a plurality of images, wherein each image has a grade associated with a plurality of aesthetic characteristics embodied in the image. [Specification page 4, lines 26-30]. The computer program product resides on a computer readable medium [storage medium 17] and displays one or more images selected from the plurality of test images and receives from a user responses for preferences for aesthetic characteristics embodied in the displayed images that correspond to aesthetic features of products, wherein the computer program product produces a graphical user interface that contains questions that illicit the information from the user. [Specification page 8, lines 6-13]

Claim 16

Another aspect of Appellant's invention is set out in claim 16, as a method executed on a computing device for determining user aesthetic preferences. The method includes selecting a set of test images from a plurality of images to present to a user, wherein each of the plurality of test images has a grade associated with each aesthetic characteristic in a predetermined set of aesthetic characteristics;

Inventive features of claim 16 include presenting a set of test images to a user. [Specification page 23, lines 24-28]. The process 30 starts by an individual examining 32 an initial set of images. The set of images are chosen to emphasize a particular aesthetic scale as well as a sub-scale within each of these.

The method also includes receiving input from the user indicating the user's preferences for one or more aesthetic characteristics expressed in one or more of the images in the set of test images. [Specification page 8, lines 6-13] The computer program receives from a user responses for preferences for said aesthetic characteristics expressed in said set of test images.

The method also includes establishing with the computing device an aesthetic profile for the user based on the user's input. The responses are sent to and received 34 by the server 16. [Specification page 8, lines 9-10] FIG. 5 shows a profile tag forming process 60 that takes 62 a numerical score that is assigned to each response and sums 64 that score with like scores from other responses of the user for the same scale. The summation of all of the scores or an average is entered 66 into a field of a vector that corresponds to the location of the scale in the profile tag. [Specification page 14, lines 1-8]

Claim 24

Another aspect of Appellant's invention is set out in claim 24, as a method for determining a product profile of a product. The method includes viewing a product and grading each aesthetic characteristic in a set of predetermined aesthetic characteristics of the product on a scale to produce a grade. [Specification page 16, lines 26-30] In FIG. 8, a coding process produces product tags that can be associated with products in the database. The coding process 90 selects 92 an image of a product to score, and has a human scorer 94 score the product image according to predetermined parameters associated with each of the scale levels, as shown in Table 1.

The inventive feature of claim 24 also includes storing on a storage device in communication with said computer device the grade in a field corresponding to the graded aesthetic characteristics within the product profile. [Specification page 17, lines 2-11] A score is assigned indicating which level of each attribute the product embodies. The statistics are collected 98 and assembled into a code that corresponds to a tag for the product. The tag is stored 100 along with a link to the product or other information associated with the product, so that the tag can be recalled when a particular type of product corresponding to the product being scored is selected by a user.

Claim 27

Another aspect of Appellant's invention is set out in claim 27, a computer-implemented method for selecting products that occurs over a networked computer system. FIG. 9 illustrates an embodiment of the computer implemented method.

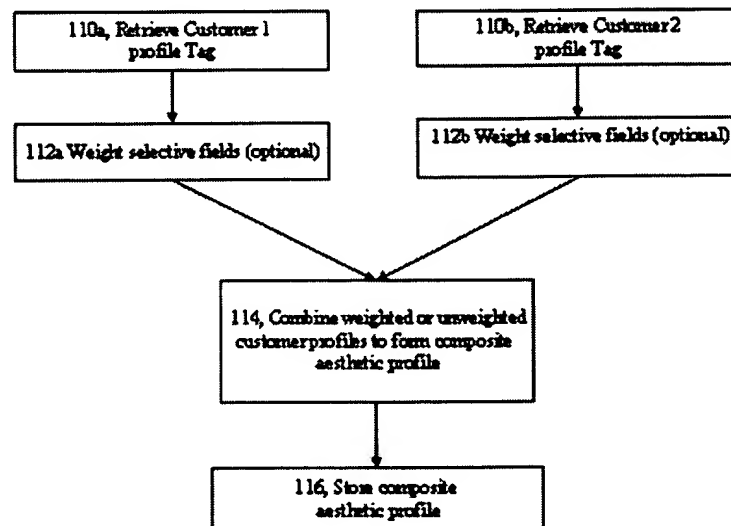


FIG. 9

The inventive features of claim 27 include retrieving a first user's profile, wherein the first user's profile comprises one or more tags which correspond to the first user's preferences for one or more aesthetic characteristics of products and retrieving a second, different user's profile, wherein the second user's profile comprises one or more tags which correspond to the second user's preferences for one or more aesthetic characteristics of products. [Specification page 17, line 10 to page 18, line 7] FIG. 9. depicts a process 110 for merging profiles from two different customers. This process 110 allows two individuals such as a husband and wife to use their common preferences to search for a particular product. The process receives 112a the profile of customer 1, and retrieve 112b the profile of customer 2.

The inventive features of claim 27 also include combining the first and second users' profile to create a composite profile of the first and second user. FIG. 9 shows that the (optionally weighted) profiles of both customers are combined 116 by averaging the values (weighted or un-weighted) in each of the tags of the customers to produce a new, composite

profile tag that corresponds to a composite of the individual profile tags. The new composite tag is stored 118 and is associated with both of the identities of the profile of the individuals whose profile was used. The composite profile tag is used to compare to tags of products in the product selection process described above.

(6) Grounds of Rejection

(1) Claim 22 stands rejected under 35 U.S.C. 112, second paragraph as being incomplete.

(2). Claims 1, 2, 4 and 36 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Blau, U.S. Patent 5,634,101A, Slotznick, U.S. Patent 5,983,200A and Harada et al., U.S. Patent 5,495,602A.

(3). Claims 3, 7 and 8 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Blau, Slotznick and Harada, and further in view of Meir et al., U.S. Patent 6,037,950A and IBM Research Disclosure, Vol. 42, Is. 423.

(4). Claim 5 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Blau, Slotznick and Harada, and further in view of Herz et al., U.S. Patent 5,754,939A.

(5). Claims 10 and 11 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Blau, and Harada et al.

(6) Claims 13, 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blau, Slotznick and Harada as applied to claim 16, and further in view of Herz et al..

(7) Claims 16, 18, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Blau, Slotznick and Harada et al.

(8) Claims 17, 19, 21 and 22 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Blau, Slotznick and Harada as applied to claim 16, and further in view of Herz et al.

(9) Claims 24 and 25 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Blau, Slotznick and Harada.

(10) Claim 26 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Blau, Haraza and Slotznick as applied to claim 24, and further in view of Surville, U.S. Patent 5,757,661A.

(11) Claims 27-34 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Herz et al.

(12) Claim 35 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Blau, Slotznick and Harada as applied to claim 1, and further in view of Herz et al.

(13) Claim 37 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Blau, Slotznick, Harada as applied to claim 1, and further in view of Surville.

(7) Argument

Indefiniteness

It is not necessary for the claims to recite every element needed for practical utilization of the claimed subject matter in order for a claim to be proper under 35 U.S.C. §112, second paragraph, *Bendix Corp. v. United States*, 600 F.2d 1364, 1369, 204 U.S.P.Q. 617, 621 (Court of Claims, 1979). It is not the role of the claims to enable one skilled in the art to reproduce the invention, but rather to define the legal metes and bounds of the invention. *In re Geoffe* 526 F.2d 1393, 1397, 188 U.S.P.Q. 131, (CCPA, 1975). The claims need not provide all operating details but a method claim should recite a positive step. *In re Erlich*, 3 U.S.P.Q. 2d 1011 (Bd. Pat. App. & Int., 1986)

Obviousness

"It is well established that the burden is on the PTO to establish a prima facie showing of obviousness, *In re Fritsch*, 972 F.2d. 1260, 23 U.S.P.Q.2d 1780 (C.C.P.A., 1972)."

"It is well established that there must be some logical reason apparent from the evidence or record to justify combination or modification of references. *In re Regal*, 526 F.2d 1399 188, U.S.P.Q.2d 136 (C.C.P.A. 1975). In addition, even if all of the elements of claims are disclosed in various prior art references, the claimed invention taken as a whole cannot be said to be obvious without some reason given in the prior art why one of ordinary skill in the art would have been prompted to combine the teachings of the references to arrive at the claimed invention. Id. Even if the cited references show the various elements suggested by the Examiner in order to support a conclusion that it would have been obvious to combine the cited references, the references must either expressly or impliedly suggest the claimed combination or the Examiner

must present a convincing line of reasoning as to why one skilled in the art would have found the claimed invention obvious in light of the teachings of the references. *Ex Parte Clapp*, 227

U.S.P.Q.2d 972, 973 (Board. Pat. App. & Inf. 985)."

"The mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification." *In re Gordon*, 221 U.S.P.Q. 1125, 1127 (Fed. Cir. 1984).

Although the Commissioner suggests that [the structure in the primary prior art reference] could readily be modified to form the [claimed] structure, "[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification." *In re Laskowski*, 10 U.S.P.Q. 2d 1397, 1398 (Fed. Cir. 1989).

"The claimed invention must be considered as a whole, and the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination." *Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick*, 221 U.S.P.Q. 481, 488 (Fed. Cir. 1984).

Obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. Under Section 103, teachings of references can be combined only if there is some suggestion or incentive to do so. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984) (emphasis in original, footnotes omitted).

"The critical inquiry is whether 'there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.'" *Fromson v. Advance Offset Plate, Inc.*, 225 U.S.P.Q. 26, 31 (Fed. Cir. 1985).

**(1) Claim 22 is complete and complies with 35
U.S. C. 112, second paragraph.**

Claim 22.

Claim 22 recites determining whether the user has given consistent responses to an aesthetic characteristic or combination of aesthetic characteristics emphasized in said plurality of sets of images and if a consistent response has been given, storing a profile tag indicating the user's preference for the aesthetic characteristic or combination of aesthetic characteristics emphasized in one or more sets of images.

The examiner states that claim 22 is: "incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP §2172.01."

Claim 22 recites all of the features need to distinguish claim 22 over the cited art. Appellant's specification teaches how to determine consistent responses and how to use that determination in building a profile tag.

Appellant's claims 22 is proper under 35 U.S.C. 112, second paragraph. The claim recites the elements necessary to distinguish Appellants' invention from the prior art. All that 35 U.S.C. 112, second paragraph requires is that the claims particularly point out and distinctly claim the subject matter that "applicant regards as his invention."

There is no need for Appellant to recite details of how to determine consistent responses. Appellant's claim recites the element needed to distinguish the invention from the cited art. The actual manner in which consistent responses is determined can vary as Appellant described in the specification. To require Appellant to recite one specific way to determine consistent responses would only force Appellant to narrow the scope of the claim without the citation of prior art compelling such a narrowing of claim scope.

The purpose of the claims is to define the legal description of the invention, not to enable one of skill in the art to reproduce the invention. *In re Geoffe*. Accordingly, Claim 22 defines the legal metes and bounds of what Appellant considers to be his invention and thus this claim is proper under 35 U.S.C. 112, second paragraph.

(2) Claims 1, 2, 4 and 36 are patentably distinct over Blau, U.S. Patent 5,634,101A, Slotznick, U.S. Patent 5,983,200A and Harada et al., U.S. Patent 5,495,602A.

Claim 1

For the purposes of this appeal only, claims 1 and 36 may be treated as standing or falling together. Claim 1 is representative of claims 1 and 36.

Claim 1 is directed a method for selecting products that occurs over a networked computer system. Claim 1 is distinct over Blau, Slotznick and Harada since neither Blau, Slotznick nor Harada suggest providing a plurality of images ... wherein each image has a grade associated with each aesthetic characteristic in a set of predetermined aesthetic characteristics; sending a user a web page that has, a plurality of test images selected from the plurality of images, one or more questions that request the user's preferences for the test images presented and receiving from a user a set of responses from the questions; and based on the user's responses, producing a profile of the user's preferences for the aesthetic characteristics in the plurality of test images.

Neither Blau, Slotznick and Harada describes or suggests providing a plurality of images ... wherein each image has a grade associated with each aesthetic characteristic in a set of predetermined aesthetic characteristics. The examiner considers Blau as teaching a plurality of images at Col. 1 line 30 to Col 2, line 20 and claim 1). However, in Blau no mention of test images is made at the portions of Blau relied on by the examiner. Rather, in those passages Blau teaches:

The present invention provides a method and apparatus that systematically and progressively probes deeper and deeper into consumer value systems and images making it possible for the market researcher to go beyond the limits of other research techniques to penetrate the veil of privacy that surrounds consumer fantasy and view the private thoughts and pictures in consumers' minds.

Accordingly, it is clear that Blau does not suggest providing the user with a series of test images but merely tries to figure out through a series of questions and text responses “what image a user would conjure in the user’s mind.”

Blau does discuss the option of using a photo as part of the product description (Col. 4 line 39 and FIG. 2A). Blau does not suggest selecting the image to emphasize an aesthetic feature, but merely supplies the image to identify the product. At Col. 3, lines 33-40 Blau discloses:

Illustrated in FIGS. 2A-2H is a multi-page prior art form 42. A first page 42A of the form provides descriptive product information and asks the consumer to list two different advantages at locations [a] and [b] which a person might get from the product description. The product information might be presented in various formats other than writing. For example, photos, illustrations, advertisements, packaging, product samples, etc. might be used.

Blau uses a photo merely for product identification. Blau does not suggest a series of images having a grade associated with each aesthetic characteristic in a set of predetermined aesthetic characteristics. Therefore, Blau fails to disclose any of the features of claim 1. Blau indeed does send the user questions and elicits responses, but neither the questions nor the responses are tied to a series of images that “has a grade associated with each aesthetic characteristic in a set of predetermined aesthetic characteristics,” as required by claim 1.

Blau also fails to suggest “sending a user a web page ... and based on the user’s responses, producing a profile of the user’s preferences for the aesthetic characteristics in the plurality of test images,” as required by amended claim 1, which the examiner concedes. The examiner relies on Slotznick to disclose this feature. The combination of Blau with Slotznick also does not suggest this feature of claim 1. The examiner relies on col. 13 lines 35-67 and Figs. 4, 6, 7, and 8 to teach producing a profile of the user’s preferences. Slotznick indeed does discuss a profile of user preferences. However, Slotznick provides no mechanism or suggestion to provide the user profile based on the user’s responses for aesthetic characteristics as expressed by the plurality of test images.

Therefore, while Appellant does not concede that the examiner has provided a suitable motivation to combine the teachings of the references, Appellant contends that such a combination of references, if properly supported, still neither describes nor suggests the features of claim 1. The combination of Blau and Slotznick would merely produce a customer profile based on the questions posed by Blau. This profile would not be based on a plurality of test images selected from the plurality of images, and would not be based on the user's preferences for the aesthetic characteristics in the plurality of test images.

Claim 1 also features that ... each image has a grade associated with each aesthetic characteristic in a set of predetermined aesthetic characteristics. The examiner also concedes that neither Blau nor Slotznick teach these features and relies on Harada and proffers a motivation to combine the teachings that: "The motivation to combine these references is the translating means translates the expression word or sensuous expression into information having specific meaning or the basis of the translated information."

Harada does not describe or suggest each image has a grade associated with each aesthetic characteristic in a set of predetermined aesthetic characteristics. Rather, Harada discloses a "sensuous expression translating system" that translates a person's verbal description of an item (e.g., a piece of fabric) into a standardized description. See, e.g., Harada at 7: 61-62; 8:59-64. For example, as Harada shows in Figure 10, and the corresponding discussion at Col. 12, lines 51-62, a designer's description of wool poplin material as "silk-like" is translated into the standard impression word "rustling." Thus, if the designer searches for a product that is "silk-like" the Harada system will translate "silk-like" into the standard impression word "rustling" and search on that word.

Clearly, Harada does not describe grading an aesthetic characteristic on a scale to produce a value for a product's aesthetic characteristic. Rather, the whole point of the Harada system is to translate a person's words describing aesthetic or sensuous features of an item into a set of standardized words. (See, e.g., Harada at 1:22-28 "The present invention also relates to a system for translating feeling expression words having different meanings (ambiguous meanings) based on different persons or aesthetic/intuitive sensuous expressions into information having a specific meaning."). Using words to describe aesthetic features of a product is of limited value because words often represent continuums that have no specific meaning.

However, a product profile that includes a graded scale (as required by the present claims) establishes the degree to which an attribute is embodied within a product, thus providing a better description of the product.

Claim 2

Claim 2 further limits claim 1 by including the action of compiling an aesthetic profile tag for the user based on the received responses. The examiner contends that Slotznick teaches this feature and relies on the same teaching from Slotznick as in the rejection of claim 1. However, Slotznick only discusses a user preference profile. Slotznick is devoid of any teachings of compiling an aesthetic profile tag.

Claim 4

Claim 4 further limits claim 1 by requiring that the user is presented with a graphical user interface that contains questions that elicit the information from the user including questions that gauge the user's preferences for the plurality of test images selected from the plurality of images. Blau, as discussed above, does not suggest a plurality of test images selected from the plurality of images. Blau does not elicit information from the user based on presenting a series of test images. Blau merely uses a series of questions to elicit answers from the user. The questions could have an image of the product, but the image of the product is used to identify the product for the user.

(3) Claims 3, 7 and 8 are patentably distinct over Blau, Slotznick and Harada, and further in view of Meir et al., U.S. Patent 6,037,950A and IBM Research Disclosure, Vol. 42, Issue. 423.

Claim 3

For the purposes of this appeal only, claims 3, 7 and 8 may be treated as standing or falling together. Claim 3 is representative of claims 3, 7 and 8. Claim 3 further limits claim 1.

Claim 3 is distinct over these references since the references neither describe nor suggest retrieving a product aesthetic tag associated with a particular product type selected by the user, the product aesthetic tag representing one or more aesthetic features of the product and forming a

result tag that contains a value corresponding to how well aesthetic features of the product match to aesthetic preferences of the customer.

Appellant contends that neither Blau, Slotznick, Harada, Meir nor the IBM article provide any suggestion of a product aesthetic tag associated with a particular product type ... the product aesthetic tag representing one or more aesthetic features of the product and forming a result tag that contains a value corresponding to how well aesthetic features of the product match to aesthetic preferences of the customer.

These features are absent in Blau, Slotznick, and Harada, as the examiner concedes. This deficiency is not cured by Meir's teachings of a profile tag pertaining to the ICC International Color Consortium and the teachings pertaining to translations of color space in video display technologies. Again, without conceding that the examiner has set forth a proper motivation, the combination of these references would utterly fail to suggest the invention as claimed in claim 3. Moreover, the examiner's contention that the claimed result tag is met by the IBM article's teachings of a resulting document that pertains to modification of web content to accommodate browser and network bandwidth limitations, has absolutely no relevance to "forming a result tag that contains a value corresponding to how well aesthetic features of the product match to aesthetic preferences of the customer," as required by claim 3.

**(4) Claim 5 is patentably distinct over Blau,
Slotznick and Harada, and further in view of
Herz et al., U.S. Patent 5,754,939A.**

Claim 5

Claim 5 further limits claim 1, by reciting that at least one of the questions presented to the user asks the user to indicate the strength of the user's preferences for an image on a scale.

The examiner concedes that Blau, Slotznick and Harada do not explicitly disclose "that at least one of the questions presented to the user asks the user to indicate the strength of the user's preferences for an image on a scale." Appellant contends that if these base references do not disclose this feature, inherently these base references cannot suggest Appellant's base claim 1 and that this statement of the examiner demonstrates the error of examiner's entire line of reasoning. That is, if these base reference do not ask the user to indicate the strength of the

user's preferences for an image on a scale, how can the references suggest the features of claim 1, as argued above?

Nonetheless, Herz does not support the examiner's position. Herz describes a system that tracks a user's feedback actively or passively. Herz does not suggest that the feedback is based on the strength of the user's preferences for an image on a scale.

**(5). Claims 10 and 11 are patentable over Blau,
and Harada et al.**

Claim 10

For the purposes of this appeal only, claims 10 and 11 may be treated as standing or falling together. Claim 10 is representative of claims 10 and 11.

Claim 10 is distinct over Blau and Harada. Claim 10 is directed to a method for producing an aesthetic profile tag for a user. The examiner considers Blau as teaching a plurality of images (at Col. 1 line 30 to Col 2, line 20 and claim 1). As argued above, Blau does not discuss test images. Rather, Blau teaches to probe "deeper in consumer value systems and images (col. 2 lines 6, 7). Blau does not suggest "a set of test images selected from a plurality of images, wherein each of the plurality of images has a grade associated with a plurality of aesthetic characteristics that are expressed in the respective image" but merely tries to determine what "image a user would conjure in the user's mind." Blau does discuss the option of using a picture as part of the product description (Col. 4 line 39 and FIG. 2A) but does not suggest "a set of test images selected from a plurality of images, wherein each of the plurality of images has a grade associated with a plurality of aesthetic characteristics that are expressed in the respective image". Blau fails to disclose any of the features of claim 10. Blau therefore cannot suggest entering ... preferences for the selected test images.

Harada apparently was not used by the examiner in rejection of claim 10, since the examiner's rejection of claim 10 only discusses Blau. Nevertheless, Harada likewise does not cure the deficiencies in Blau.

The examiner uses Harada in combination with Blau in rejecting claim 11. Claim 11, which depends on claim 10, sets forth exemplary aesthetic characteristics as including at least one of: form, material, decoration, overall appearance, and novelty.

Harada does not describe or suggest aesthetic characteristics as including at least one of: form, material, decoration, overall appearance, and novelty. Rather, Harada discloses a “sensuous expression translating system” that translates a person’s verbal description of an item (e.g., a piece of fabric) into a standardized description.

Clearly, Harada does not describe a grade associated with a plurality of aesthetic characteristics that are expressed in the respective image as required by base claim 10. Rather, the whole point of the Harada system is to translate a person’s *words* describing aesthetic or sensuous features of an item into a set of standardized *words*. (See, e.g., Harada at 1:22-28,)

Moreover, Harada is directed at a personalized translation system in which the user characterizes the aesthetic or sensuous qualities of a product. In Harada, for example, one user may call a shirt “green” whereas another user may call the same shirt “blue.” Thus, a single product is defined as both “blue” and “green” depending upon who is looking at it. In contrast, claim 10 requires a grade associated with a plurality of aesthetic characteristics that are expressed in the respective image. Thus, unlike Harada, the claims require particular aesthetic characteristics which are expressed in the images.

Additionally, there is no motivation to combine Blau and Harada. Harada is directed at a sensuous word translation system, whereas Blau is directed at a system to probe “deeper in consumer value systems and images (col. 2 lines 6, 7). There is no apparent reason why a person of skill in the art would be motivated to integrate a sensuous word translation system into a system for to probe “deeper in consumer value systems and images.

**(6) Claims 13, 14 and 15 are patentable over
Blau, Slotznick and Harada et al.**

Claim 13

For the purposes of this appeal only, claims 13-15 may be treated as standing or falling together. Claim 13 is representative of claims 13-15.

Claim 13 is directed to a computer program product for establishing a user profile of aesthetic preferences. Claim 13 is allowable over the references, since the references neither describe nor suggest, instructions to transmit to a user over a networked computer system a set of test images selected from a plurality of images, wherein each image has a grade associated with

each aesthetic characteristic in a set of predetermined aesthetic characteristics and receive from a user responses for preferences for said aesthetic characteristics expressed in said set of test images and a graphical user interface that contains questions that elicit information from the user regarding the user's preferences for aesthetic characteristics expressed in said set of images.

The examiner's argument is based on a misreading of Blau, Slotznick and Harada et al. The examiner considers Blau as teaching a plurality of images at Col. 1 line 30 to Col 2, line 20 and claim 1). However, as argued above Blau does not teach a series of test images but merely tries to figure out what "image a user would conjure in the user's mind." Blau fails to disclose any of the features of claim 1. While Blau does send the user questions and elicits responses, neither the questions nor the responses are tied to a series of images that "has a grade associated with each aesthetic characteristic in a set of predetermined aesthetic characteristics," as required by claim 1.

Blau also fails to teach the graphical user interface feature which the examiner concedes. The examiner relies on Slotznick to disclose this feature. This feature of claim 13 is also not suggested by the combination of Blau with Slotznick. The examiner relies on col. 13 lines 35-67 and Figs. 4, 6, 7, and 8 to teach producing a profile of the user's preferences. Slotznick indeed does discuss a profile of user preferences; However, Slotznick provides no mechanism or suggestion to provide the user profile based on the user's responses for aesthetic characteristics as expressed by the plurality of test images.

Therefore, while Appellant does not concede that the examiner has provided a suitable motivation to combine the teachings of the references, Appellant contends that such a combination of references, even if properly supported, would not provide the features of claim 13, but would merely produce a customer profile based on the questions posed by Blau. This profile would not be based on a plurality of test images selected from the plurality of images, and would not be based on the user's preferences for the aesthetic characteristics in the plurality of test images.

Claim 13 also features that ... each image has a grade associated with each aesthetic characteristic in a set of predetermined aesthetic characteristics. The examiner also concedes that neither Blau nor Slotznick teach these features and relies on Harada and proffers a motivation to combine the teachings that: "The motivation to combine these references is the

translating means translates the expression word or sensuous expression into information having specific meaning or the basis of the translated information.”

Harada does not describe or suggest each image has a grade associated with each aesthetic characteristic in a set of predetermined aesthetic characteristics. Rather, Harada discloses a “sensuous expression translating system” that translates a person’s verbal description of an item (e.g., a piece of fabric) into a standardized description. See, e.g., Harada at 7: 61-62; 8:59-64. As argued above, Harada does not describe grading an aesthetic characteristic on a scale to produce a value for a product’s aesthetic characteristic. Rather, the whole point of the Harada system is to translate a person’s words describing aesthetic or sensuous features of an item into a set of standardized words. (See, e.g., Harada at 1:22-28,).

**(7) Claims 16, 18, and 20 are patentable over
Blau, Slotznick and Harada et al.**

Claim 16

For the purposes of this appeal only, claims 16, 18 and 20 may be treated as standing or falling together. Claim 16 is representative of claims 16, 18 and 20.

Claim 16 is allowable over the applied references since the references neither describe nor suggest a method for determining user aesthetic preferences. Specifically the references do not suggest selecting a set of test images from a plurality of images to present to a user, wherein each of the plurality of test images has a grade associated with each aesthetic characteristic in a predetermined set of aesthetic characteristics. For reasons discussed above, neither Blau, Slotznick nor Harada et al. suggest this feature. The combination of references do not suggest the feature of presenting the set of test images to a user and receiving input from the user indicating the user’s preferences for one or more aesthetic characteristics expressed in one or more of the images in the set of test images. While the references do discuss user profiles, none of the references discuss establishing with the computing device an aesthetic profile for the user based on the user’s input.

**(8) Claims 17, 19, 21 and 22 are patentable over
Blau, Slotznick and Harada et al. and Herz et al.**

Claim 21

For the purposes of this appeal only, claims 17, 19 and 21 may be treated as standing or falling together. Claim 21 is representative of claims 17, 19 and 21.

Claim 21 further limits claim 16 adding the limitation that selecting further comprises selecting a plurality of sets of test images to a user with each set of images emphasizing an aesthetic characteristic or combination of aesthetic characteristics. Neither Blau, Slotznick Harada, nor Herz suggest this feature as argued above. The examiner concedes that neither Blau nor Slotznick suggest this feature. The examiner does not address Harada but instead relies on Herz to suggest this feature. Herz does not support the examiner's position. Herz describes a system that tracks a user's feedback actively or passively. Herz does not suggest that the feedback is based on with each set of images emphasizing an aesthetic characteristic or combination of aesthetic characteristics.

Claim 22

Claim 22 further limits claim 22 and requires determining whether the user has given consistent responses to an aesthetic characteristic or combination of aesthetic characteristics emphasized in said plurality of sets of images and if a consistent response has been given, storing a profile tag indicating the user's preference for the aesthetic characteristic or combination of aesthetic characteristics emphasized in one or more sets of images.

The examiner concedes that neither Blau nor Slotznick suggest this feature. The examiner does not address Harada but instead relies on Herz to suggest this feature.

**(9) Claims 24 and 25 are patentable over Blau,
Harada and Slotznick and Harada et al.**

Claim 24

For the purposes of this appeal only, claims 24 and 25 may be treated as standing or falling together. Claim 24 is representative of claims 24 and 25.

Claim 24 is directed to a method for determining a product profile of a product. Claim 24 requires grading each aesthetic characteristic in a set of predetermined aesthetic characteristics of the product on a scale to produce a grade and storing ... the grade in a field corresponding to the graded aesthetic characteristics within the product profile.

While Blau does discuss the option of viewing a product, Blau does not suggest grading each aesthetic characteristic in a set of predetermined aesthetic characteristics of the product on a scale to produce a grade, which the examiner concedes. The examiner relies on Harada et al for this feature. However, Harada et al likewise does not suggest this feature. Rather, Harada et al. discloses a "sensuous expression translating system" that translates a person's verbal description of an item (e.g., a piece of fabric) into a standardized description. See, e.g., Harada at 7: 61-62; 8:59-64. As argued above, Harada does not describe grading an aesthetic characteristic on a scale to produce a value for a product's aesthetic characteristic. Rather, the whole point of the Harada system is to translate a person's words describing aesthetic or sensuous features of an item into a set of standardized words. (See, e.g., Harada at 1:22-28,).

While Appellant does not concede motivation to combine Blau and Harada, such a combination, if suggested, would not provide the features of claim 24. The examiner's proffered motivation: "The motivation to combine these references is the translating means translates the expression word or sensuous expression into information having specific meaning or the basis of the translated information." is insufficient because it fails to show how the Blau system which deals with text based responses that illicit answers would be benefit by a system that translates a user's description of aesthetic or sensuous features of an item into a set of standardized words.

**(10) Claim 26 is patentable over Blau, Harada
and Slotznick and Surville.**

Claim 26

Claim 26 further limits claim 24 and includes grading the aesthetic characteristics of the product ... and storing the grades in a plurality of fields in a product profile, wherein each field in the product profile corresponds to an aesthetic characteristic.

The examiner incorrectly argues that Blau, Harada and Slotznick disclose the "claimed invention." As pointed out this is incorrect. The examiner relies on Surville to disclose "a plurality of scales."

The examiner seeks to combine the teachings of the base references with Surville to: "... ensure a variation of different grading scales for different products." This motivation, as with the teaching of Surville have no relevance to grading the aesthetic characteristics of the product ... and storing the grades in a plurality of fields in a product profile, wherein each field in the product profile corresponds to an aesthetic characteristic.

(11) Claims 27-34 are unpatentable over Herz et al.

Claim 27

Claim 27 is directed to a method for selecting products. Claim 27 requires retrieving a first user's profile, wherein the first user's profile comprises one or more tags which correspond to the first user's preferences for one or more aesthetic characteristics of products and retrieving a second, different user's profile, wherein the second user's profile comprises one or more tags which correspond to the second user's preferences for one or more aesthetic characteristics of products; and combining the first and second users' profile to create a composite profile of the first and second user.

Herz is directed to a system that produces a user profile. Unlike claim 27 however, Herz defines the user profile as that which holds user attributes including "age/zip code etc." (Col. 4 lines 54-55). Herz fails to suggest that the user profile comprises one or more tags which correspond to the first user's preferences for one or more aesthetic characteristics of products.

The examiner states that Herz retrieves a second user's profile as "multiple profiles are incorporated in the summary of digital profiles and this incorporates a first and a second profile." The examiner misconstrues this teaching of Herz. At Col. 4 line 36 to Col. 5 line 67, Herz teaches a summary of digital profiles of target objects (Herz Col 4 lines 56-57). Target objects are the object available for access by the user. Target objects are not user profiles. Therefore, Herz does not suggest the second user profile. Consequently, Herz does not suggest combining

the first and second users' profile to create a composite profile of the first and second user, as also required by claim 27.

Dependent claims 28-34 add distinct features to claim 27, are allowable at least for the reasons discussed in claim 27. Moreover, these claims are individually distinct over Herz. Since Herz utterly fails to suggest any of the features of claim 27, it is not necessary for Appellant to argue the dependent claims.

**(12) Claim 35 is patentable over Blau, Slotznick,
Harada and Herz et al.**

Claim 35

Claim 35 further limits the method of claim 1. Claim 35 recites that one or more of the plurality of images selected from the plurality of test images is selected to emphasize a particular aesthetic characteristic in the set of predetermined aesthetic characteristics. This feature is used to emphasis in the series of test images a particular aesthetic characteristic in order to form an accurate assessment of the user's aesthetic preferences.

As argued above, neither Blau, Slotznick nor Harada disclose or suggest the features of claim 1 including the test images. The examiner apparently concedes this point and chooses to rely upon Herz. However, in the cited passages of Herz and well throughout Herz the use of images, in general, and test images selected to emphasize a particular aesthetic characteristic specifically is not suggested. Rather, in the cited passages Herz describes target objects, privacy, and so forth. Herz does not mention images nor does Herz use images to emphasize a particular aesthetic characteristic, as part of a method for producing a profile of the user's preferences for the aesthetic characteristics in the plurality of test images, as required by the base claim 1

**(13) Claim 37 is rejected under 35 U.S.C. 103(a)
as being unpatentable over Blau, Slotznick,
Harada as applied to claim 1, and further in
view of Surville.**

Claim 37

Claim 37 further limits the method of claim 1 by specifying that the grade represent a level of intensity of an aesthetic characteristic.

Claim 37 is distinct over the Blau, Slotznick, and Harada references as argued above for base claim 1. The examiner admits that these references do not suggest specifying that the grade represent a level of intensity of an aesthetic characteristic. The examiner incorrectly relies upon Surville. However, Surville uses the term "grade," in the sense of adjusting the parameters that go into a CAD analysis to design a new garment with different sizes. Surville thus defines "grading" at Col. 1 lines 20-25 as:

Other sizes to be worn by members of a population are obtained by "grading" which consists in feeding the computer with grading rules for the garments, i.e. the way in which the coordinates of characteristic points of the garments, in particular peripheral points thereof, vary with size for each piece of the garment. Firstly, these grading rules are worked out on the basis of the empirical knowledge of the person doing the grading, i.e. the "grader". Secondly, there are numerous grading rules for various types of garment. The difficulty in applying such a method lies in choosing appropriate rules for properly chosen characteristic points of each piece of a garment and for a given starting size.

These teachings have nothing at all to do with specifying that the grade represent a level of intensity of an aesthetic characteristic.

Applicant : David Hornstein
Serial No. : 09/543,868
Filed : April 5, 2000
Page : 27 of 34

Attorney's Docket No.: 11642-005001

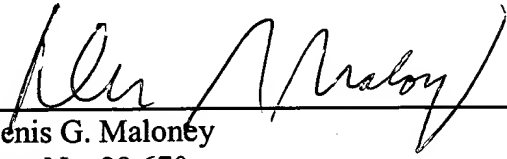
Conclusion

Accordingly, it is submitted that the examiner erred in rejecting Appellant's claims and should be reversed.

Respectfully submitted,

Date: _____

2/18/01



Denis G. Maloney
Reg. No. 29,670

Fish & Richardson P.C.
225 Franklin Street
Boston, MA 02110-2804
Telephone: (617) 542-5070
Facsimile: (617) 542-8906

Appendix of Claims

1. A method for selecting products that occurs over a networked computer system comprising:

providing a plurality of images stored on a storage device, wherein each image has a grade associated with each aesthetic characteristic in a set of predetermined aesthetic characteristics;

sending a user a web page that has:

a plurality of test images selected from the plurality of images;

one or more questions that request the user's preferences for the test images presented; and

receiving from a user a set of responses from the questions; and

based on the user's responses, producing a profile of the user's preferences for the aesthetic characteristics in the plurality of test images.

2. The method of claim 1 wherein producing further comprises:

compiling an aesthetic profile tag for the user based on the received responses.

3. The method of claim 1 further comprising:

retrieving a product aesthetic tag associated with a particular product type selected by the user, the product aesthetic tag representing one or more aesthetic features of the product;

forming a result tag that contains a value corresponding to how well aesthetic features of the product match to aesthetic preferences of the customer.

4. The method of claim 1 wherein the user is presented with a graphical user interface that contains questions that elicit the information from the user including questions that gauge the user's preferences for the plurality of test images selected from the plurality of images.

5. The method of claim 1 wherein at least one of the questions presented to the user asks the user to indicate the strength of the user's preferences for an image on a scale.

6. The method of claim 1 wherein web page includes a control for the user to enter a value corresponding to how the user rates one or more of the test images.

7. The method of claim 3 further comprising:
rank ordering the result tags.

8. The method of claim 7 further comprising:
presenting the user with the products corresponding to the rank ordered result tags.

9. (cancelled)

10. A method executed on a computing device for producing an aesthetic profile tag for a user comprises:

viewing, on a display associated with the computing device, ~~an~~ set of test images selected from a plurality of images, wherein each of the plurality of images has a grade associated with a plurality of aesthetic characteristics that are expressed in the respective image; and

entering, on a user input device associated with the computing device, preferences for the selected test images.

11. The method of claim 10 wherein the predetermined set of aesthetic characteristics include at least one of: form, material, decoration, overall appearance, and novelty.

12. The method of claim 10 wherein each aesthetic characteristic is graded into one of three levels.

13. A computer program product for establishing a user profile of aesthetic preferences, said computer program product residing on a computer readable medium comprises instructions for causing a computer to:

transmit to a user over a networked computer system a set of test images selected from a plurality of images, wherein each image has a grade associated with each aesthetic characteristic in a set of predetermined aesthetic characteristics;

receive from a user responses for preferences for said aesthetic characteristics expressed in said set of test images, wherein the computer program product produces a graphical user interface that contains questions that elicit information from the user regarding the user's preferences for aesthetic characteristics expressed in said set of images.

14. The computer program product of claim 13 further comprising instructions to:
compile an aesthetic profile tag for the user based on the received responses for the aesthetic characteristics expressed in said set of test images ~~scales~~.

15. A system for selecting products, said system comprising:
a computer;
a storage device comprising a plurality of images, wherein each image has a grade associated with a plurality of aesthetic characteristics embodied in the image;
a computer program product residing on a computer readable medium comprising instructions for causing a-the computer to:
display one or more images selected from the plurality of test images;
receive from a user responses for preferences for aesthetic characteristics embodied in the displayed images that correspond to aesthetic features of products, wherein the computer program product produces a graphical user interface that contains questions that illicit the information from the user.

16. A method executed on a computing device for determining user aesthetic preferences, the method comprising:
selecting a set of test images from a plurality of images to present to a user, wherein each of the plurality of test images has a grade associated with each aesthetic characteristic in a predetermined set of aesthetic characteristics;
presenting a said set of test images to a user,

receiving input from the user indicating the user's preferences for one or more aesthetic characteristics expressed in one or more of the images in the set of test images; and
establishing with the computing device an aesthetic profile for the user based on the user's input.

17. The method of claim 16, wherein one or more images in the set of test images are selected to emphasize a particular aesthetic characteristics.

18. The method of claim 16, wherein the predetermined set of aesthetic characteristics comprises one or more of: form, material, decoration, overall appearance, and novelty.

19. The method of claim 16, wherein presenting a set of images to the user further comprises:

presenting the user with a scale in which to indicate the strength of the user's preferences for one or more images presented in the set of test images.

20. The method of claim 16, wherein the input from the user indicating the user's preferences for one or more aesthetic characteristics expressed in of one or more images in the set of images comprises the user's selection of an image from the set of test images.

21. The method of claim 16, wherein said selecting further comprises:
selecting a plurality of sets of test images to a user, wherein each set of images emphasizes an aesthetic characteristic or combination of aesthetic characteristics.

22. The method of claim 21, further comprising
determining whether the user has given consistent responses to an aesthetic characteristic or combination of aesthetic characteristics emphasized in said plurality of sets of images; and
if a consistent response has been given, storing a profile tag indicating the user's preference for the aesthetic characteristic or combination of aesthetic characteristics emphasized in one or more sets of images.

23. (cancelled)

24. A method executed on a computing device for determining a product profile of a product, the method comprising the steps of:

viewing a product;

grading each aesthetic characteristic in a set of predetermined aesthetic characteristics of the product on a scale to produce a grade; and

storing on a storage device in communication with said computer device the grade in a field corresponding to the graded aesthetic characteristics within the product profile.

25. The method of claim 24 further comprising:

viewing one or more electronic images of the product.

26. The method of claim 24, further comprising:

grading the aesthetic characteristics of the product on a plurality of scales; and

storing the grades in a plurality of fields in a product profile, wherein each field in the product profile corresponds to an aesthetic characteristic.

27. A computer-implemented method for selecting products that occurs over a networked computer system comprising:

retrieving a first user's profile, wherein the first user's profile comprises one or more tags which correspond to the first user's preferences for one or more aesthetic characteristics of products;

retrieving a second, different user's profile, wherein the second user's profile comprises one or more tags which correspond to the second user's preferences for one or more aesthetic characteristics of products; and

combining the first and second users' profile to create a composite profile of the first and second user.

28. The method of claim 27, wherein the step of combining the first and second users' profile comprises:

combining a tag contained in the first user profile associated with an aesthetic characteristic with a tag contained in the second user profile associated with the same aesthetic characteristic; and

storing the combined tag in a the composite profile.

29. The method of claim 28, wherein the step of combining a tag contained in the first and second users' profile comprises:

averaging a value associated with the tag contained in the first user profile with a value associated with the tag contained in the second user profile.

30. The method of claim 28, wherein the step of combining a tag contained in the first and second users' profile comprises:

assigning a weight factor to a value associated with a tag contained in the first user profile associated with an aesthetic characteristic;

assigning a weight factor to a value associated with a tag contained in the second user profile associated with the same aesthetic characteristic; and

averaging the weighted values of the tags in the first and second users' associated with the same aesthetic characteristic.

31. The method of claim 28, further comprising:

receiving input from the first user indicating how the first and second users' profile should be combined.

32. The method of claim 28 further comprising:

presenting the first or second user with one or more questions to determine how the first and second users' profile should be combined.

33. The method of claim 27, wherein the first user profile includes one or more tags which correspond to the first user's preferences for one or more non-aesthetic characteristics of products.

34. The method of claim 33, wherein the non-aesthetic preferences include at least one of desired price range, brand preference, vendor preference, or product availability.

35. The method of claim 1 wherein one or more of the plurality of images selected from the plurality of test images is selected to emphasize a particular aesthetic characteristic in the set of predetermined aesthetic characteristics.

36. The method of claim 1 wherein the set of predetermined aesthetic characteristics comprises one or more of: form, material, decoration, overall appearance, and novelty.

37. The method of claim 1 wherein the grade represent a level of intensity of an aesthetic characteristic.